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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,416	12/21/2001	Simon Cawley	3439	3577

22886 7590 12/19/2003

AFFYMETRIX, INC  
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EXAMINER

MARTINELL, JAMES

ART UNIT PAPER NUMBER

1631

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/028,416	CAWLEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James Martinell	1631	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                 | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: ____                                     |

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The disclosure is objected to because of the following informalities.

- (a) Blanks appear at page 2, lines 11 and 12.
- (b) At page 6, after line 15, the header "**BRIEF DESCRIPTION OF THE DRAWINGS**" should be added.
- (c) In claims 2, 18, and 34, "comprising" should be changed to "comprises".

Appropriate correction is required.

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Embedded hyperlink and/or other form of browser-executable code appear in at least the following locations:

- (a) page 8, line 6 and
- (b) page 12, line 3.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 7-18, 23-34, and 39-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague, indefinite, and incomplete.

- (a) The recitation of "adenine rich region" (claims 1, 2, 17, 18, 33, and 34) is vague and indefinite because the metes and bounds of the claims are not clearly defined.
- (b) The recitation of "at the end of the sequence" (claims 1, 2, 17, 18, 33, and 34) is vague and indefinite because it is not clear which end is meant. It is suggested that applicant use terms such as 3' and 5' to avoid any confusion.
- (c) The recitation of "thymine rich region" (claims 1, 2, 17, 18, 33, and 34) is vague and indefinite because the metes and bounds of the claims are not clearly defined.

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- (d) The recitation of "at the beginning of the sequence" (claims 1, 2, 17, 18, 33, and 34) is vague and indefinite because it is not clear which end is meant. It is suggested that applicant use terms such as 3' and 5' to avoid any confusion.
- (e) The recitation of "sequences derived from RNA transcript sequences" (claims 1, 17, and 33) is vague and indefinite because the instant application does not tell how to distinguish a sequence derived from an RNA transcript sequence from a sequence not derived from an RNA transcript sequence.
- (f) The recitation of "neighboring" (claims 1, 17, and 33) is vague and indefinite because the metes and bounds of the claims are not clear. The boundary line for "neighboring" is not clearly set forth.
- (g) The recitation of "the EST" (claims 1, 17, and 33) is incomplete because there is no antecedent basis for the term.
- (h) The recitation of "scanning" (claims 1, 2, 17, 18, 33, and 34) is vague and indefinite because it is not known what is meant by the term.
- (i) The recitation of "after the block (claims 7, 23, and 39) is vague and indefinite because the relationship of the elements is not clear. It is suggested that applicant use terms such as 3' and 5' to avoid any confusion.
- (j) The recitation of "before the polyadenylation" (claims 8, 24, and 40) is vague and indefinite because the relationship of the elements is not clear. It is suggested that applicant use terms such as 3' and 5' to avoid any confusion.
- (k) The recitation of "evaluating the probability" (claims 9, 25, and 41) is vague and indefinite because it is not clear what is meant by the step.
- (l) The recitation of "before the polyadenylation site" (claims 9, 25, and 41) is vague and indefinite because the relationship of the elements is not clear. It is suggested that applicant use terms such as 3' and 5' to avoid any confusion.

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- (m) Claims 9, 10, 11, 13, 14, 25-27, and 41-43 are vague, indefinite, and incomplete because "h" is undefined.
- (n) Claims 9, 10, 11, 13, 14, 25-27, and 41-43 are vague, indefinite, and incomplete because "k" is undefined.
- (o) Claims 9, 11, 25, 27, 41, and 43 are vague, indefinite, and incomplete because "N" is undefined.
- (p) The recitation of "using a gamma function" (claims 12, 28, and 44) is vague and indefinite because it is not clear what is meant by the phrase.
- (q) The recitation of "to produce a density which places a majority of its weight on the bases" (claims 12, 28, and 44) is vague and indefinite because it is not clear what is meant by the passage.
- (r) The recitation of "is modeled using . . . from human 3' UTRs" (claims 13, 39, and 45) is vague and indefinite because it is not known what is meant by the passage.
- (s) The recitation of "wherein the first term . . . Markovian probabilities" (claims 14, 30, and 46) is vague and indefinite because it is not known what is meant by the passage.
- (t) The recitation of "base b" (claims 15, 16, 31, 32, 47, and 48) is incomplete because there is no antecedent basis for the term.
- (u) The recitation of "base b . . . 3' UTR sequences" (claims 15, 31, and 47) is vague and indefinite because the passage is not understood.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 17-22, and 33-38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Beaudoin et al (Genome Res. 10: 1001 (July 2000)). Beaudoin et al teaches computer methods for

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searching for polyadenylation signals in DNA and EST sequences (*e.g.*, see the **METHODS** section on page 1008). The claims describe no more than the reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (703) 308-0296. The fax phone number for Examiner Martinell's desktop workstation is (703) 746-5162. The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be e-mailed to [james.martinell@uspto.gov](mailto:james.martinell@uspto.gov). Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 305-4028.

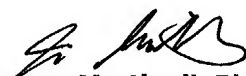
**PLEASE NOTE THE NEW FAX NUMBER**

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

**AFTER ABOUT JANUARY 12, 2004 USPTO OFFICES WILL BE MOVED**

Offices of the USPTO will soon be moved. After the date in the header to this section Examiner Martinell may be reached at (571) 272-0719 and the fax phone number for his desktop workstation will be (571) 273-0719. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (571) 272-0722.

  
**James Martinell, Ph.D.**  
**Primary Examiner**  
**Art Unit 1631**